



Given:  $PJ=6$ ,  $QP=3$ ,  
 $JT=8$ ,  $TF=4$

Prove:  $\triangle PJT \sim \triangle QJF$

Statement	Reason
$PJ=6$ , $QP=3$ ,	Given
$JT=8$ , $TF=4$	Given
$\angle PJT \cong \angle QJF$	Reflexive Property
$PJ + QP = QJ$	Segment Addition Postulate
$6 + 3 = QJ$	Substitution
$9 = QJ$	Addition
$JT + TF = JF$	Segment Addition Postulate
$8 + 4 = JF$	Substitution
$12 = JF$	Addition
$\frac{JF}{JT} = \frac{12}{8} = 1.5$	def. of ratio
$\frac{JQ}{PJ} = \frac{9}{6} = 1.5$	def. of ratio
$\frac{JF}{JT} = \frac{JQ}{PJ}$	Transitive Property
$\triangle PJT \sim \triangle QJF$	SAS Similarity Thm